



Illuminating
ENGINEERING SOCIETY

RECOMMENDED PRACTICE:
LIGHTING AIRPORT
OUTDOOR ENVIRONMENTS
AN AMERICAN NATIONAL STANDARD



ANSI/IES RP-37-22

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AN AMERICAN NATIONAL STANDARD**

Publication of this Recommended Practice
has been approved by IES.
Suggestions for revisions
should be directed to IES.

**Prepared for IES by the
IES Aviation Lighting Committee**



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Preface

This preface is not part of ANSI/IES RP-37-22. It is provided for informational purposes only.

This Recommended Practice (RP) does not provide general lighting information that is included in other IES documents. If the reader does not already have this information, it may be obtained as needed from the following IES Standards:

The Lighting Science Series:

- *ANSI/IES LS-1-22, Lighting Science: Nomenclature and Definitions for Illuminating Engineering*
- *ANSI/IES LS-2-20, Lighting Science: Concepts and Language of Lighting*
- *ANSI/IES LS-3-20, Lighting Science: Physics and Optics of Radiant Power*
- *ANSI/IES LS-4-20, Lighting Science: Measurement of Light – The Science of Photometry*
- *ANSI/IES LS-5-21, Lighting Science: Color*
- *ANSI/IES LS-6-20, Lighting Science: Calculation of Light and Its Effects*
- *ANSI/IES LS-7-20, Lighting Science: Vision – Eye and Brain*
- *ANSI/IES LS-8-20, Lighting Science: Vision – Perceptions and Performance*

The Lighting Practice Series:

- *ANSI/IES LP-1-20, Lighting Practice: Designing Quality Lighting for People and Buildings*
- *ANSI/IES LP-2-20, Lighting Practice: Designing Quality Lighting for People in Outdoor Environments*
- *ANSI/IES LP-3-20, Lighting Practice: Designing and Specifying Daylighting for Buildings*
- *ANSI/IES LP-4-20, Lighting Practice: Electric Light Sources – Properties, Selection, and Specification*
- *ANSI/IES LP-6-20, Lighting Practice: Lighting Control Systems – Properties, Selection, and Specification*
- *ANSI/IES LP-7-20, Lighting Practice: The Lighting Design and Construction Process*
- *ANSI/IES LP-8-20, Lighting Practice: The Commissioning Process Applied to Lighting and Control Systems*

- *ANSI/IES LP-9-20, Lighting Practice: Upgrading Lighting Systems in Commercial and Industrial Facilities*
- *ANSI/IES LP-10-20, Lighting Practice: Sustainable Lighting – An Introduction to the Environmental Impacts of Lighting*
- *ANSI/IES LP-11-20, Lighting Practice: Environmental Considerations for Outdoor Lighting*
- *ANSI/IES LP-12-21, Lighting Practice: IoT Connected Lighting*
- *ANSI/IES LP-13-21, Lighting Practice: Introduction to Resilient Lighting Systems*
- *ANSI/IES LP-16-22, Lighting Practice: Documenting Control Intent Narratives and Sequences of Operations*

1.0 Introduction and Scope

1.1 Introduction

ANSI/IES RP-37-22, Recommended Practice: Outdoor Lighting for Airport Environments is a guide for the planning and design of lighting systems in the entire airport outdoor environment. It has been prepared as a guide for the application of fixed outdoor lighting in and around the airport environment with respect to the airport's special requirements. These requirements include (but are not limited to):

- Height restrictions (such as obstructions affecting navigable airspace) as defined by the governing civil aviation authorities
- The ability to distinguish color of light for visual cues
- Prevention of light trespass that may interfere with the vision of pilots or air traffic control tower (ATCT) personnel
- Air traffic controllers' ability to see approaching aircraft and aircraft performing ground operations within the "aircraft movement area" without glare or direct or indirect light trespass
- Pilots' ability to detect runway lighting without glare or direct or indirect light trespass

ANSI/IES RP-37-22 provides guidance for dealing with the preceding considerations, while being cognizant of the